432 MHz AND ABOVE EME NEWS

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- CONTL NA NET: SCOTT, KD4LT AND JAY, K5JL.
- EUR NET: JOE, K1ROG (207-469-3492).
- EME STANDINGS: JIM STARKEY, W0KJY, 3845 CAPITOL DRIVE, FT. COLLINS, CO 80526, (970) 226-0669)
- THE WEB VERSION OF THIS NL IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT: http://www.nitehawk.com/rasmit/em70cm.html

CONDITIONS:

Summer time arrived early. May SW operation seemed laid back and conditions summertime like - not very good. Libration was particularly annoying on 70 cm. What is needed are some high power dxpeditions to perk thing up. But so far little has been hear of dxpedition activity for Summer `96. One possibility is YL3AG. We received word that they will be on 23 cm as well as other bands, but have no details.

7M2PDT

Shu has replaced his antenna with 8 x 25 el FO, open wire, vert pol, yagis, and his PA with an 8938. His PA's output power at this moment is about 1.3 KW. He worked on 22 April K0RZ (O/O) for initial #26, 19 May SM2CEW (O/O) #27, on 20 May JA3IAF (M/M) #28, on 23 May JH1XUJ (O/O) #29, and on 25 May

KB8ZW (O/O) #30, K2UYH (O/O) #31, N4GJV(O/O) #32, JA2KRW (439/439) and JA5OVU (449/539).

DF9CY/DL0SHF

Chirs writes -- I have not been too active lately. My girl friend is suffering from a heart attack (at the age of 35!), and this takes a lot of my time. I bought antennas from DK8LV (8 x 33 el yagis), and have put up a heavy duty mast. I hope to be on 70 cm with this system, good preamps, and open-wire feedline, in the fall EME contest. I may operate one contest weekend on 23 cm at DL0SHF and the other at my own new station. All is organized for travel to the Bowie EME conference. Ulli, DL3YEL and I hope to have a good trip to the US. We would like to visit as many EMEers as possible. I have a new e-mail address, which I prefer for my mail: Chris, DF9CY/DL0SHF I have also installed a www-page with DL0SHF info: DF9CY's Homepage.

G3LQR

Simon's 13 cm EME activity has taken a back seat to 24 and 47 GHz tropo experimentation -- Please cancel any 13 cm skeds for me, as the system is still not going. I listen during the last SW, but heard nothing. The 2320 RX seems to be more sensitive than the 2304 RX, so I will concentrate on 2320 MHz 1st. I was getting 9.5 dB of Sun noise during the SW, but I use to get 11 dB. I wonder if this loss could be the result of a drop in solar flux? For TX my VE4MA amp is going, but needs water cooling, before I run it up hard. Then I have to build a hybrid and a 2nd amp to get the needed power. I also want to try a G170 cavity on 23 cm. I have plans from W7GBI. My 8 yagis for . MHz are still up, but need attention. The 14' dish is OK, but will need im- proved readouts for 13 cm operation. I plan to be a little more active during the coming months.

G4DZU

Doug did not have a very good SW -- On 25 May, nothing was heard from ZS6AXT on sked, just my echoes. Idid QSO'd KB2AH later that evening. On 26 May, the PA output went down to 30 w, just as I was echo testing, before a sked with DD1XF. It took me 8 hours to locate a dry joint in the FT980.

G4FUF

Keith finds that random activity continues to yield more success than skeds -- Been busy last couple of weeks so little activity. The high light of the last SW was adding PY5ZBU (449/339) for initial #61. I now need VK/ZL for WAC and obviously am interested in skeds. I would like to avoid skeds between 1300-2300, However I was active for all my skeds last weekend during these hours. I now have a TWTA for 24 GHz giving 12 w output. Is anyone ready for this band yet? [Contact WA7CJO]

JA4BLC

Yoshiro will not be at home for the next SW -- In May, soon after coming home from the JA EME meeting, I worked, on 432, on 3 May JS3SIM (339/339) on random, on 18 May G4DZU (O/O) for initial #53 in a 1296 MHz extra sked, on 19 May, back on 432 MHz, JA2KRW (449/549), G4FUF (449/O), JA9BOH (549/439), JR9NWC (449/449), JA5OVU (549/539) and JH1XUJ (449/439), and on 1296 MHz EA6/DF5JJ (549/559) - all on random. Heard on 18/19 May were JH4JLV and SM2CEW on 432, and DD1XF and JR4AEP on 1296. About the photograph which appeared on page 117 of the May 96 QST, I must tell you the owner of the 2.4 m dish is not JH3EAO, but Toshi, JR4BRS. The beer drinker is definitely Yoshiro, JA4BLC - hi. Toshi is now working a new 5.6 m dish (f/D 0.45). He is finishing the building, and plans to lift it on to his tower in June. I am very sorry to report that I will not to able to attend the big EME meeting this summer because of heavy business tasks.

JR9NWC

Tany (PM85bw) reports the following QSOs on 432: On 22 Feb at 0950 I5TDJ (M/M) for initial #38 and K1FO (519/439), on 24 Feb at 1122 IK5WJD #39 and 1147 JA2KRW (519/449), on 9 March at 1610 JA6CZD (549/549), on 23 March 0008 NC1I (559/539), 0030 N4GJV (559/549), 0055 K1FO (559/549), 0804 JL1ZCG (539/519), 0924 DL9KR (569/559) and 1106 OZ4MM (539/449) #41, on 24 March at 0155 K5AZU (539/529) #42, 0311 W7HAH (O/O) #43, 1148 SM3AKW (449/439) and 1205 UR5LX (449/0) #44, on 30 March at 1512 EA3UM (449/439) #45 and 1530 HB9SV (449/449), on 20 April at 2347 JA9BOH (0/0) #46, on 21 April at 0924 DF3RU (339/449) #47 and 1119 PA3CSG (449/449), on 28 April at 1352 JA2KRW (449/439), on 29 April at 1440 JA2KRW (449/439), on 3 May at 1238 JA2KRW (539/539) #48, on 5 May at at 1520 JA3IAF (449/449) #49, and on 7 May at 1509 W9QXP (O/O) and 1529 JA5OVU (539/529). My ant system is 8 x 21 el horiz yagis with 1 KW PA (3CX800A7-2). Tany can be reached at (HIDEYUKI.TANIGUCHI, 60-12-2, Kataya-cho, Takefu City, FUKUI 915 JAPAN, GL). His e- mail address is Tany, JR9NWC

K1FO

Steve found April SW conditions good but polarity often ill defined or opposite from usual, especially during daytime. On Friday night (local time) the stronger JA stations could be copied at any polarity angle. On Saturday night (local time) pol to Japan was the opposite of normal. Usually 80%+ of the time Steve transmits horiz to JA and receives vert (for fixed horizontal JA stations). On Saturday he was coping most of the JA's horizontal. Activity from Europe was low, but activity during the Asian window was very good. This was most likely due to the high dec and favorable local time operating hours. Steve had limited time to operate as this was the 1st weekend this year with good (and warm) weather in CT and duties out in the yard called. Stations worked in April were

on 06 April W6JKV, on 19 April JA9BOH and JH4JLV, on 20 April JA5OVU, JA2KRW, JA4BLC, OK1KIR, HB9SV, DL8OBU, YO2IS, DF3RU, W9QXP and WA9FWD, on 21 April JA3IAF, KA0RYT and W9OXP, on 22 April N4PZ and JA5OVU, on 25 April N4PZ with very low libration fading that night, on 26 April UT7VF partial, on 27 April NC1I, DL8OBU and G4FUF, and on 28 April DL9NDD. Other stations heard over the skeds weekend were UR5LX, K5GW, W7HAH and JS3SIM. Steve had very limited operating time in May. He worked on 24 May K5GW, JA5OVU and IN3KLQ. Steve was on calling CQ at other times, but it seemed that by the time he got on in the evening all the activity for the day was over. Steve received his EME directory and thanks the DUBUS gang for putting out a very professional document. He notes that all his info in the directory is correct. The only addition is that he does have rotatable polarity. Steve made a typographical error in his last report. The new S7 call he copied was \$57QH. He is still looking for information on \$57QH and OM1TF. N4EL sent a letter to Steve inquiring about a 7213 cavity. Dick now lives in Texas and is interested in getting back on 70 cm EME. The amplifier that Dick has was manufactured by Microwave Cavity Laboratories of LaGrange, IL. The model number is #11060 and is listed as tuning 150 to 350 MHz. Dick has heard that it can be modified to tune up to 450 MHz. If anyone can help Dick he can be reached at: Dick, N4EL or his address is now: Dick Beerman, 10062 Warwana, Houston, TX 77080. Steve's 70 cm EME totals are: #494 initials, 49 states and 75 DXCC.

KD4LT

Scott has not had much operating time this year due to the needs of his business. Scott has also started construction of his new 6.7 m (22 ft) dish for 23 cm. This has taken most of his free time. Stations worked for initials this year are: JH0YSI #269, JH4JLV #270, WB6IMC #271, K5AZU #272 & WAS 33, 7M2PDT #273 and OZ4MM #274. Scott is looking for electrical prints for a Wavetek 1034a power meter for Rainer DF6NA. If you can help, Please forward to Scott or DF6NA direct. If you know where one can be found, Send Scott a Email message advising him at Scott, KD4LT. His EME Totals are on 70 cm init #274, EME WAS 33 and DXCC 45, and on 23 cm Init #4, WAS 3 and DXCC 2.

N0BPM

Greg writes -- I have been bitten by the EME bug, and really dont know where to start. Is there a book that one can get? [Try vol 1. of the ARRL's Microwave Handbook.] I am going to build at least 4 FO22's`. I am also interested in building a small dish. I have read a little about them, but is there anyone who I could get a set of plans from? [Try WB9FWD].

OZ4MM

Stig's May activity report for 70 cm follows -- I worked on 25 May JH1XUJ (539/449) for initial #68, JA2KRW (549/559), JA5OVU (449/559), JR9NWC (539/449), UA4API (439/529) #69, DL9NDD (549/559), JA9BOH (539/449) #70, SM3AKW (549/559), EA6/DF5JJ (549/559) #71, 9M2BV (449/549) and JA6XED (549/O) #72, and on 26 May SM2CEW (569/569), IK2EAD (549/O) #73, K5GW (579/579) #74 and KA0RYT (549/539).

UR5LX

Sergej worked on 26 March CT1DMK (O/O) for initial #283, on 20 March DF3RU, NC1I and WB6IMC (O/O) #284, on 21 March K5GW (569/559) #285, W2CRS (O/O), DF6NA, WE7P (O/M), SM4IVE and DL9KR, and on 28 March JA5OVU and EA6/DF5JJ. Sergej and Alex, UR4LL are planning to attend the International EME Conference in Aug.

VE1ALQ

Darrell writes -- Not very much to report this month as Murphy was in the shack again. I lost my HV supply. I have 4 32 Mfd 2500 Vdc filter caps connected parallel, and 1 of them failed. The PS softstart worked FB, but as soon as the voltage exceeded 1000 volts, one of the caps would start drawing current, and when the softstart relay closed to shunt the resistor, "bang" went my main fuses. Needless to say before I got the filter bank out, found and replaced the bad cap, and got everything running, the skeds were over. This is the 1st time I remember ever loosing an oil filed capacitor. The bad cap will still operate below 1000 V, but as soon as 1000 V is exceeded, it starts to leak like mad. I apologize to those stations I missed on the sked, but all looks FB now.

W1ZX

Willie's EME Report for June -- I worked 25 May at 2330 G4FUF (O/O) and sent several on the 25th and 26th. I have not been very active since the March SW, as I have been busy working on the '96 EME Int'l Conference, and my 1990 Chevy Pick-up which has engine problems - hi. I have reserved additional space at the Comfort Inn address: P.O. Box 730, Bowie, MD 20718, FAX 301 805 5563, the Econo Lodge same FAX 301 805 5563, and the Comfort Inn Phone 301 464 0089. I am also going to have a number of AIL 75 Noise Figure Meters For Sale (Cash & Carry) at the Conference. **An AIL 75 NF Meter will be raffled off.**

W2UHI

Frank is happy to report -- I have updated my antenna to a 5.5 m dish. I was ready for the May activity week end by 2 days. I observed a 3 dB improvement in Sun noise and a 6 dB improvement in echoes. This makes EME more fun, instead of a chore. I worked the following on 23 cm: On 25 May DJ9YW (O/449), F1ANH (559/559), KB2AH on SSB (52/54), HB9BBD (549\559), OH2AXH (549/549), IK3COJ (O/339), VE4MA (0/549), N2IQU on SSB

(52/54), WD5AGO (539/339), AA4TJ (539/539), and on 26 May ZS6AXT (549/559) and EA6/DF5JJ (559/569). On 29 May K1FO was visiting N2IQU and Mark and I did a little 1296 demo for Steve on SSB (52/54). When I upgraded from the .4 f/D 3.7 m dish to the .45 f/D 5.5 m dish, I found the VE4MA feed is over illuminating my dish as evidenced by 1st side lobes only being down about 12 dB and the main lobe is narrower than expected. This lowers the efficiency of the antenna system and of course is rather noisy. [Something sound wrong with the feed. Is the cup properly aligned?] I am in the process of fabricating a W2IMU dual mode feed for the antenna. I know this will be somewhat under illuminated, but I think this is the way to lean. I feel that the improved efficiency and lower noise will more than offset the loss of gain due to under illumination. Please note I have changed my e-mail provider to AT&T. They provide me with an 800 number and I save a bundle. My new address is: Frank, W2UHI.

W4HHK

Paul worked on 13 cm EME on 26 May W7GBI (479/M) and 27 May SM3AKW (M/O) for initial #32 - this was a marginal QSO due to tree blockage. WB5LUA was also "O" copy on 24 May.

W7GBI

Charlie reports --I was active on 432 for the May DW. Conditions seemed quite good, but activity was low -- probably because of the holiday weekend in the US. I managed to work 3 initials K5GW, KA0RYT and JS3SIM. I had no luck on my skeds with G4FUF, nor extra skeds with PY5ZBU. On 2304 I heard nil from SM3AKW, but later managed to work old faithful, W4HHK. Later on 432 again, I worked K0RZ with good sigs. My operation is still limited, but I continue to feel stronger everyday. I sure look forward to the day when I am able to complete some of the projects I have started. Because of my health, I am sorry to say that I will not make the EME Conference this time.

WB6IMC

Jonathon is moving -- I will be moving in June to a new QTH, and I will discontinue my 70 cm EME operations from La Puente as of 14 June. I hope to have my station operational by Aug. The new QTH has real estate, and I will be able to expand my EME capabilities. Hopefully this expansion will include a bigger antenna. Either a new array of 16x15 el yagis with pol rotation or the addition of 4 more 37 el yagis fed with open wire phasing lines. Also I will be working on at least a 16' parabola for 23 cm. I am up to initial #12 with my existing station. My E-Mail address will not be valid after 14 June, but I will send out the new one ASAP.

ZS6AXT

Ivo brings us up to date on his activity -- I QSO'd on 2 March on 1296 F1ANH,

F5PL, F2TU, OZ4MM, SM3AKW, F6CGJ, OH2AXH, OE9XXI, HB9BHU, DLOSHF, GW3XYW, SM2CEW, F5AQC, HB9BBD, OK1KIR, VE1ALQ, OE9ERC, LA8LF, LX1DB, N2IOU, K5JL, DD1XF and K2UYH; CWNR were JA4BLC, JH5LUZ, S59DCD, DF3RU, DF9QX, IK3COJ, DF7FJ, F5PAU, AA4TJ, G3LQR, VK5MC and SM5DGX, on 3 March JA4BLC, JH5LUZ, HB9SV, I2COR, G3LQR, SM3AKW, VE1ZJ and AA4TJ; CWNR were VK5MC, F5PAU, SM5DGX, G4DZU, DF9QX, DF3RU and I6PNN, on 23 March EA6/DF5JJ, N2IQU and W2UHI; and then on 432 OZ4MM, PA3CSG, SM2CEW, SM3AKW, UR5LX, DK3GW, I2COR, K1FO, NC1I, N4GJV and KD4LT, heard or CWNR were VK5MC, JA2KRW, JL1ZCG, DL9KR, JR9NWR, IK6EIW, EA2LU, UT5TEL, G4FUF, K0RZ and UA6LGH, on 30 March back on 1296 EA6/DF5JJ, DF9QX, HB9BHU, LA8LF, AA4TJ, KB2AH, W2UHI, DJ9YW and VE1ALQ, on 20 April, on 432 G4FUF (M/O) for initial #151, then on 1296 EA6/DJ5FF, OH2AXH, W2UHI, KB2AH, N2IQU, KB2AH and N2IQU, and on 21 April HB9BBD, VE1ALQ and KB2AH; heard were KD5RO, W2UHI and SM?? I became quite ill in March with bad pain in my belly, after extensive tests my gall- bladder was removed on 10 April, The diagnosis was very acute inflammation. One problem was that my XYL was in OK2- land (and still is) at the time, but I managed. I have recovered well and am now nearly back to normal. I will be in Eur from 16 June to 1 Aug. I intend to visit Friedrichshafen plus OE9ERC and OE9XXI, then DL9KR and maybe LX1DB, and with the help of SM3AKW visit SM4IVE, SM2CEW and some other SMs. I am making a video of all stations visited. Progress here is slow. I have an IMU feed for 13 cm nearly completed and am working on the LNA and HPA. I have also started work on a 10 GHz system. but getting parts is a problem. I need a source for 1 to 2.2 pfd ATC chip caps. The new Mini-Circuits ERA 1 to 3 MMIC gain blocks give more than 10 dB at 10 GHz are a real plus. I have problems with the dc supply line to my 70 cm LNA and am presently not QRV on this band.

ZS6JON

Jon writes -- I have been active on satelites for a couple of years, and am now slowly turning toward the moon. I have put up 2 x 35 el yagis, DJ9BV design, with the DJ9BV pre-amps. I would like to test the recieving capability's of these antennas before going any bigger. Could you tell me where one could get a lisy of skeds say for the SWs to know what times to listen to the guys, and see if I am actually be able to hear anything. [See start of this NL for 20 net time and freq, see end of NL for skeds list ... you can also contact the Skeds Coordinator by e-mail, etc.]

K2UYH

I was active on both 432 and 1296 this month. On 432 I found libration fadding to be a real problem, but still added some initials. On 70 cm, I QSO'd on 25

May at 0329 7M2PDT (O/O) for initial #567, 0350 KA0RYT (549/549), 2027 K5GW (569/569) #568, 2038 IK2EAD? (449/-) - lost, many QRZs, 2038 DL9NDD (459/559), 2118 K0RZ (559/549), 2200 nil WE7P and 2230 WB6IMC (O/M) #569. On 26 May, I returned later than expected from a wedding, but discovered that my 1296 skeds [which I added to the list] were out of WA7BBM and S59DCDs window. I reskeded with WA7BBM but heard nil - I was unable several minutes into the skeds.

NETNEWS:

DL6WU is now on-line. Guenter can be reached via e- mail at: Guenter, DL4WU.

JR4AEP on 19 May worked EA6/DF5JJ (O/O) on 1296.

SM0PYP has moved into a house. My new address is (Paul Chominski, 5021 Via Papel, San Diego, CA 92122; Phone/Fax at home (619) 623 9693, at work (619) 535 9505 ext 2035 and Fax at work 535 8206). His e-mail address listed in last month's NL was wrong, and should read: Paul, SM0PYP.

KB2AH is making good progress on a 2nd 18' dish. This dish will be mounted 30' in the air and allow Tom to operate near the horizon on 1296.

K6HXW has a new call W6WE. This call was previously held by Mike's father.

UT5UAS is reported to be doing a little better health wise.

I6PNN is now QRV on 5760 with the same dish as he uses on 23 and 13 cm. He is looking for skeds and expects to keep his 6 cm feed in place for at least the next 2 months.

FOR SALE:

SMOPYP is **looking a solid dish about 2.4 m dia for 10 GHz EME** - see Paul's new address and tel in the Netnews above.

W1ZX has for sale: a Bird 43 Wattmeter - call for \$, AIL 75 Noise Figure Meter with cabinet \$US275 + shipping, several Transco "Y" type Relays with "N" connectors \$ US 50 + shipping. Call Willie at 301 645 5584 between 2000-2230 EST, or FAX 301 645 6853, 24 hrs. Willie's e-mail address is Willie, W1ZX

N4PZ has for sale 432 and 144 MHz amps with 1.5 KW out using GS23B (4CX1600u). These amps are rack mounted w/metering, but less power supply for

KB2AH is producing **VE4MA like 1296 feeds with built-in IMU type circular polarizer.** He also has a complete line of **1296 HPAs** (6, 4, 2 or 1 x 7289 amps) available.

TECHNICAL:

We are fortunate this month to have notes from KB2AH on his improved 2C39/7289 Cavity amplifier designs.

FINAL: It was the ARRL's June Contest weekend when I composed the balk of this NL. I thought the next SW was on 22/23 June. Only later I discovered that it is 2 weeks later, because of the poor perigee and high dec alignment this summer. I had hoped to get on the Moon to give out some contest points, but family commitments and the perceived need to get this NL out, limited operation to a stint on 23 cm. Have you sent in your EME Conference pre-registration form to W4RDI? I have not done so yet, but will get it in this week. The form was on the last page of the last NL. The deadline is 30 June! Pre-registration will make organizing and running the conference easier for Willie and the other volunteers. Please get it in, and most important, be sure to come! The Trenton area is little more than a 2 hour train ride way from the conference. I want to invite all who have the time to come on up and visit. KB2AH's QTH is not too far off and I know he also would be pleased to provide a tour of his station. Please keep the info coming, especially more technical material. I will not be too active during the next SW as my oldest daughter is getting married this weekend.

Hope to CU off the Moon.... 73 - Al, K2UYH.

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Sked requests for 6 JULY
Time
         432.045 432.070
2230 IW5AVM - JH0YSI
2300
                   IW5AVM - 7M2PDT
2330 IW5AVM - JA6XED G4FUF - 7M2PDT
Sked requests for 6 JULY
                                      432.070
Time
       432.040
                       432.045
0000
                    IW5AVM - JH4JLV G4FUF - JA2JRJ
0030
                    G4FUF - JA6CZD IW5AVM - JO3RNL
                    G4FUF - JA6XED
0100
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0430
      HP3XUG - UR5LX
0630
      LU7DZ - DK3WG G4FUF - SM3AKW
0700
      DK3WG - VE6TA K5GW - IW5AVM WB6IMC - UR5LX
0730
     KAORYT - DK3WG VE6TA - DL9NDD
0800
      VE6TA - IW5AVM W2CRS - I5TDJ
0830
      W7CI - G4FUF W2CRS - IK5WJD VE6TA - PA3CSG
0900
                      VE6TA - G4FUF
                      W7HAH - G4FUF
0930
2300
                      IW5AVM - JA7BMB
2330
                      IW5AVM - JA8ERE
Sked requests for 7 JULY
Time
       432.045
                         1296.050
0000
      IW5AVM - JA5YJS
0030
    IW5AVM - JA5OVU
0100
      IW5AVM - JR9NWC
0630
                      KD5RO - SM5DGX
0700
                      KD5RO - SM3AKW
0730
                      VE1ALQ - S59DCD
1530
                      JH5LUZ - VE1ALQ
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LATEST INFO ON INTERNATIONAL EME CONFERENCE IN WASHINGTON DC.

Do not forget to read it!

This information was obtained from Scott, KD4LT

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For comments or corrections: Rein, W6/PA0ZN.